aspirating a sample;

mixing a sample;

dispensing into a sample;

controlling the temperature of a function;

removing material from a sample;

separating a sample; and

removing and separating a sample;

wherein each of the functions except centrifuging is performed external to a centrifuge.

6.     A computer system for configuring a machine to automatically perform a method of isolating nucleic acids, the computer system comprising:

a computer;

a computer readable medium comprising machine readable instructions for causing the computer to output a command series to an automated nucleic acid isolation machine for control of the functions of nucleic acids isolation process;

wherein the computer readable medium comprises:

a software module comprising:

a centrifugation sub-module for issuing commands initiating centrifuging of a sample for a centrifuge time and a centrifuge speed;

an aspiration sub-module for issuing commands initiating aspirating a sample to remove a volume of fluid from a sample;

a mixing sub-module for issuing commands initiating mixing a sample;

a dispensing module for issuing commands initiating dispensing into a sample an amount of a specific reagent;

a temperature control module for issuing commands to control the temperature of a function;

a removal module for issuing commands to remove material from a sample;

a separation module for issuing commands to separate a sample into

components; and

a combination removal and separation module for issuing commands to

control separating and removing a sample; and

wherein each sub-module except the centrifugation sub-module is

configured to control operation external to a centrifuge.

Please cancel claim 7.

9.    A control module for controlling the operation of an automated nucleic acids isolation

apparatus, the module comprising:

a processor; and

a program module comprising a set of machine readable instructions for issuing

commands to the automated nucleic acids isolation apparatus to perform a series of steps,

comprising:

centrifuging a sample;

aspirating a sample;

mixing a sample;

adding a reagent to the sample;

controlling the temperature of an isolation function;

removing material from a sample;

separating a sample; and

separating and removing a sample;

wherein each of the functions except centrifuging is performed external to a centrifuge.

14.   A computer control module for an automated nucleic acids isolation apparatus, the

control module comprising:

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a plurality of sub-modules, each sub-module comprising machine readable instructions

for creating a command to the nucleic acids isolation apparatus to perform a

process step of the nucleic acids isolation process; and

an output link for communicating the commands to the nucleic acids isolation

apparatus;

wherein the plurality of sub-modules comprises:

a centrifuge sub-module for issuing commands initiating centrifuging of a sample for a

centrifuge time and a centrifuge speed;

an aspirate sub-module for issuing commands initiating aspirating a sample to remove

a volume of fluid from a sample;

a mixing sub-module for issuing commands initiating mixing a sample;

a dispensing module for issuing commands initiating dispensing into a sample an amount of a

specific reagent;

a temperature control module for issuing commands to control the temperature of a

function;

a removal module for issuing commands to remove material from a sample;

a separation module for issuing commands to separate a sample into components; and

a combination removal and separation module for issuing commands to control

separating and removing a sample;

wherein each sub-module except the centrifugation sub-module is configured to

control operation external to a centrifuge.

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Please cancel claim 15.